



INTEGRAL FOAM DAM (IFD) FOR FLOATING ROOF TANKS

CTS foam dams offer an optimal solution for installing stationary systems for low expansion foam on existing storage tanks. Every tank is different and operating conditions vary significantly. Local requirements on firefighting systems also vary from location to location and finally foam dams play a major role in fighting rim fires. They can therefore practically be regarded as safety critical equipment.

Our integral foam dams can be installed on both external and internal floating roofs to concentrate low expansion foam in the seal area in the case of a rim fire. Our integral foam dam is bolted directly to the rim angle. It is modular in design, thoroughly tested and can be installed in little time. An integral foam dam can be engineered to suit any secondary seal design and may be supplied in (galvanized) carbon steel and different grades of stainless steel.

Engineering

During the engineering phase our team of engineers will review local requirements, safety aspects and tank geometry to tailor the product to each specific tank. All other important properties, such as material selection are taken into consideration for optimal reliability of the foam dam. Proper material selection ensures a long term maintenance free service life.

Completely in line with our sustainability vision all safety and reliability requirements will play a major role in the decisions we make during design.

Solutions

- Compliance to NFPA 11 requirements
- Shortened times to extinguish fire
- No need for hot work, easy installation
- Service life expectation in excess of 30 years
- Short foam accumulation time, quick fire fighting

Highlights

- Maintenance free, no need for any (future) blasting or painting
- Can be installed on tanks in service
- Reducing foam consumption considerably (in many cases less than 50% foam would be required compared to traditional foam dams)
- Adaptable to both horizontal and vertical rim angles
- Can be manufactured in stainless steel
- Designed for each specific tank
- Compliant with all international standards such as API, EN, and NFPA
- Successfully used by all reputed major oil and tank storage companies

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Low maintenance solution

Traditional foam dams are usually welded to the steel deck, equipped with drain holes. Quite often debris and corrosion scales are trapped in these drain holes, limiting drainage possibilities.

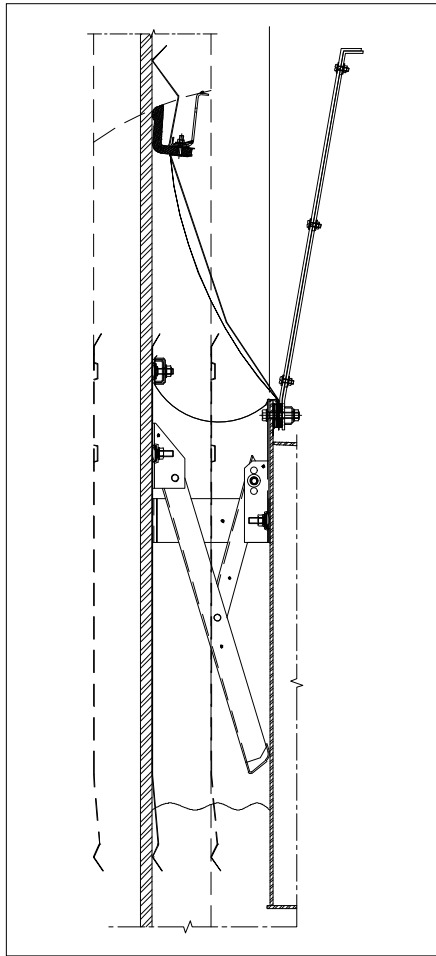
When product residue is scraped from the tank shell by the secondary seal this will then accumulate in the foam dam area together with rain water. This combination will create an aggressive environment in which corrosion rates can be very high (see picture). Not only will this affect the reliability of the system it will influence compliance to regulations. Repair and mitigation in this stage will be quite costly.

Complete solution

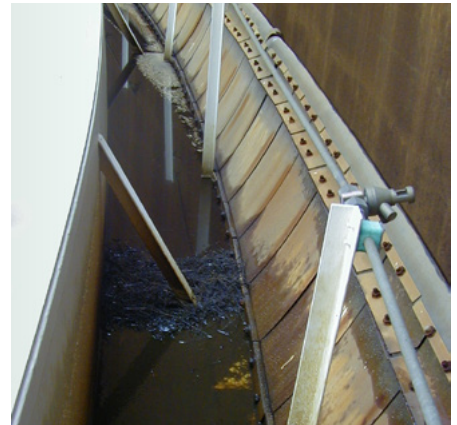
The CTS foam dam solution is complete from engineering to commissioning. We will provide a turn key solution, experienced supervision or supply drawings, installation manual and installation advice that offer the opportunity for local crews to install the seal as well without compromising safety, durability or performance.

Support and assistance

If this datasheet triggers more questions our team of experts will be always available to support and assist you in selecting the optimal solution for your specific application.



Integral foam dam (IFD), cross section.



Typical corrosion between tank seal and welded foam dam.



Foam dam test.



Live foam test on external floating roof tank with an integral foam dam.



Integral foam dam immediately after live foam test.

All our product information and specifications are drafted with care but can be subject to change. We reserve the right to change product specifications.

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CTS GROUP

**PARTNER IN
TANK STORAGE
SOLUTIONS.**

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